INDUSTRIAL WASTEWATER DISCHARGE CLASS I PERMIT

Permit No: 11-1-089

FOR DISCHARGE OF WASTEWATER ISSUED BY ORANGE COUNTY SANITATION DISTRICT

In accordance with the provisions of the Wastewater Discharge Regulations of Orange County Sanitation District, herein referred to as "District",

CAL-AURUM INDUSTRIES INC.
15632 CONTAINER LANE
HUNTINGTON BEACH, CA 92649

hereinafter referred to as "Permittee", is hereby authorized to discharge industrial wastewater from the above identified facility into the District's sewer system in accordance with the conditions set forth in this permit. Such conditions are as specified in the following parts of this permit:

Part 1 - Effluent Limits and Flow Basis
Part 2 - Monitoring, Notification, and Reporting Requirements
Part 3 - Standard Conditions
Part 4 - Special Conditions

Compliance with this permit does not relieve the Permittee of its obligation to comply with the District's current Wastewater Discharge Regulations, any applicable pretreatment regulations, standards or requirements under local, State, and Federal laws, including any such regulations, standards, requirements or laws that may become effective during the term of this permit. Non-compliance with any term or condition of this permit constitutes a violation of the current Wastewater Discharge Regulations.

This permit shall become effective on April 01, 2013 and shall expire on March 31, 2015.

James E. Colston
Environmental Compliance Manager

Issued on

March 25, 2013

ORANGE COUNTY SANITATION DISTRICT, CALIFORNIA
10844 Ellis Avenue
Fountain Valley, CA 92728-8127
(714) 962-2411

PART 1 - EFFLUENT LIMITS AND FLOW BASIS

During the period from April 01, 2013 to March 31, 2015, Permittee is authorized to discharge industrial wastewater into the sewer system tributary to the District's sewerage facilities. The effluent discharge shall not exceed either the following concentration limits in mg/L or the mass emission rate limits in lbs/day. If your mass emission rate is based on flow, then your flow base is presumed to be 28000 gallons per day (gpd) of wastewater flow at the sampling point.

Company Name: CAL-AURUM INDUSTRIES INC.			**Permit No.:** 11-1-089	
Sewer Address:	**Flow Base:** 28000 gpd		**Effective Date:**	04/01/2013
15632 CONTAINER LANE HUNTINGTON BEACH, CA 92649	**WWAR Percent Loss:** **WWAR Fixed Loss:**	5	**Expiration Date:**	03/31/2015
Primary Category: Electroplating	**Subcategory:** 40 CFR # 413.14 PSES		**Subpart:** A->Electroplating of Common Metals Subcategory	
Secondary Category: Electroplating	**Subcategory:** 40CFR # 413.24		**Subpart:** B->Electroplating of Precious Metals Subcategory PSES	
Secondary Category: Electroplating	**Subcategory:** 40CFR # 413.54		**Subpart:** E->Coating Subcategory PSES	
Secondary Category: Electroplating	**Subcategory:** 40CFR # 413.64		**Subpart:** F->Chemical Etching and Milling Subcategory PSES	
Secondary Category: Electroplating	**Subcategory:** 40CFR # 413.74		**Subpart:** G->Electroless Plating Subcategory PSES	
Secondary Category: Metal Finishing	**Subcategory:** 40CFR # 433.17		**Subpart:** A-Metal Finishing PSNS	

DISCHARGE LIMITS

CONSTITUENT	Instantaneous Limit mg/L	Daily Max mg/L	4-Day Avg mg/L	Monthly Avg mg/L	Daily Max lbs/day	Monthly Avg lbs/day
Arsenic	**2.000**	**2.000**	■	■	**0.467**	■
BOD	■	■	■	■	15000	10000
CN(A)	**1.000**	**0.860**§	■	**0.320**§	**0.430**§	■
CN(T)	5.000	1.800§	■	0.560§	0.421§	■
Cadmium	**1.000**	**1.000**§	■	**0.440**§	**0.234**§	■
Chromium	2.000	2.000§	■	2.000§	0.467§	■
Copper	**3.000**	**3.000**§	■	**1.840**§	**0.701**§	■
Dissolved Sulfides	0.500	0.500	■	■	■	■
Lead	**2.000**	**0.610**§	■	**0.320**§	**0.143**§	■
Mercury	0.030	0.030	■	■	0.007	■
Nickel	**10.000**	**4.080**§	■	**1.880**§	**0.953**§	■
Oil & Grease Min.	100.000	100.000	■	■	■	■
PCB	**0.010**	**0.010**	■	■	■	■
Pesticides	0.010	0.010	■	■	■	■
Silver	**5.000**	**1.090**§	■	**0.460**§	**0.255**§	■
Total Metals	■	10.500§	■	5.000§	3.067§	■
Total Sulfides	**5.000**	**5.000**	■	■	■	■
Total Toxic Organics	0.580	0.580	■	■	■	■
Zinc	**10.000**	**3.970**§	■	**1.750**§	**0.928**§	■
pH	6-12	6-12	■	■	■	■

SAMPLING POINT LOCATION: The above effluent limits apply at the sampling point located in the south west corner of the parking lot next to the building. The sample point is a sump and represents all industrial wastewater discharge from the facility.

§ Combined waste stream formula

Cyanide limits apply at the sampling point after cyanide treatment, but prior to dilution with other streams. If there is no cyanide treatment, the sample must be taken at the end of the cyanide process before dilution with other process streams. In the absence of cyanide process, the limits apply at the sampling point location described above (end of pipe).

PART 2 - SELF-MONITORING, NOTIFICATION AND REPORTING REQUIREMENTS

I. SELF-MONITORING REQUIREMENTS

Permittee shall conduct monitoring of its own wastewater effluent for the purpose of determining the status of compliance/non-compliance and user charges. Based on the results, Permittee shall make the necessary adjustments/corrections to bring the wastewater discharge into immediate compliance with its permitted limits. The specific requirements are as follows:

A. Monitoring/Sampling Requirements

From the effective date of the permit and until the permit is terminated or revised, Permittee shall monitor its wastewater discharge for the following parameters at the indicated frequency[1]:

Parameters	Measurement Frequency	Sample Type[2]	Procedure
Metals:			
Cadmium	Quarterly	Composite	Composite
Chromium	Monthly	Composite	Composite
Copper	Monthly	Composite	Composite
Lead	Monthly	Composite	Composite
Nickel	Monthly	Composite	Composite
Silver	Monthly	Composite	Composite
Zinc	Quarterly	Composite	Composite
Cyanides:			
CN(T)	Semi-Annual	Grab	four(4) grab samples which may be combined by the laboratory personnel prior to analysis
Organics[4]:			
624	Semi-Annual	Grab	four(4) grab samples which must be individually analyzed
Others:			
None			
Flow (gal/day)[3]			
pH[3]			

[1]**NOTE: To the extent that special conditions in Part 4 of this permit require more extensive self monitoring, the special conditions shall apply.**

[2]Sample type is either composite or grab as defined in current Wastewater Discharge Regulations under Section 102.

[3]Flow and pH should be measured concurrently with composite sampling.

[4]See Attachment A Section 3c for a list of Total Toxic Organic constituents, if applicable.

B. Representative Sampling and Laboratory Analyses

Samples and measurements taken as required herein shall be representative of the volume and nature of the regulated industrial discharge during hours of production. All samples shall be taken at the sampling point location as designated in this permit. All equipment used for sampling and analysis must be routinely calibrated, inspected, and maintained to ensure its accuracy. All sampling and laboratory analyses shall be conducted in accordance with Attachment A.

C. Frequency, Sampling Schedule and Due Dates for Submission of Reports

Sampling of wastewater effluent and reporting of results shall be done in accordance with the schedule shown below. Sampling may be performed any day within the specified date range as designated in this permit. If sampling cannot be conducted within the specified date for any valid reason, the District must be notified in advance and in writing, of the reason(s) for the inability to sample and the new proposed sampling date.

1. Quarterly and Semi-Annual Frequency Deadlines

METALS		**Sampling Date**	**Report Submission Due Date**
Fourth Quarter	(Apr 2013 - Jun 2013)	April 1 - April 16	April 30, 2013
First Quarter	(Jul 2013 - Sep 2013)	July 1 - July 16	July 31, 2013
Second Quarter	(Oct 2013 - Dec 2013)	October 1 - October 16	October 31, 2013
Third Quarter	(Jan 2014 - Mar 2014)	January 1 - January 16	January 31, 2014
Fourth Quarter	(Apr 2014 - Jun 2014)	April 1 - April 16	April 30, 2014
First Quarter	(Jul 2014 - Sep 2014)	July 1 - July 16	July 31, 2014
Second Quarter	(Oct 2014 - Dec 2014)	October 1 - October 16	October 31, 2014
Third Quarter	(Jan 2015 - Mar 2015)	January 1 - January 16	January 31, 2015
Fourth Quarter	(Apr 2015 - Jun 2015)	April 1 - April 16	April 30, 2015
BOD, TSS		**Sampling Date**	**Report Submission Due Date**
None			
CYANIDES		**Sampling Date**	**Report Submission Due Date**
Second Half	(Jan 2013 - Jun 2013)	April 1 - April 16	April 30, 2013
First Half	(Jul 2013 - Dec 2013)	October 1 - October 16	October 31, 2013
Second Half	(Jan 2014 - Jun 2014)	April 1 - April 16	April 30, 2014
First Half	(Jul 2014 - Dec 2014)	October 1 - October 16	October 31, 2014
Second Half	(Jan 2015 - Jun 2015)	April 1 - April 16	April 30, 2015
ORGANICS		**Sampling Date**	**Report Submission Due Date**
Second Half	(Jan 2013 - Jun 2013)	April 1 - April 16	April 30, 2013
First Half	(Jul 2013 - Dec 2013)	October 1 - October 16	October 31, 2013
Second Half	(Jan 2014 - Jun 2014)	April 1 - April 16	April 30, 2014
First Half	(Jul 2014 - Dec 2014)	October 1 - October 16	October 31, 2014
Second Half	(Jan 2015 - Jun 2015)	April 1 - April 16	April 30, 2015
OIL & GREASE		**Sampling Date**	**Report Submission Due Date**
None			

2. **Monthly, Weekly, and Daily Frequency Deadlines**

a. Samples must be collected in accordance with the requirements specified in Part 2 Section A, as applicable.

b. Depending on the self-monitoring frequency, sampling must be conducted in the following manner, as applicable:

(i) **Monthly Self-Monitoring**

A sample of the wastewater effluent shall be collected and analyzed a minimum of one (1) sampling day per month. The sampling day shall be rotated to the successively different plant operational day during each month of monitoring.

(ii) **Weekly Self-Monitoring**

A sample of the wastewater effluent shall be collected and analyzed a minimum of four (4) sampling days per month (once a week). The sampling day shall be rotated to the successively different plant operational day during each week of monitoring.

(iii) **Daily Self-Monitoring**

A sample of the wastewater effluent shall be collected and analyzed each day of discharge each month.

c. Reporting of monthly, weekly, and daily self-monitoring results must be done on a monthly basis. Self-monitoring reports must be submitted by the twentieth (20th) day of the month following sampling.

D. Requirements for Reporting Results

1. Self-Monitoring Reports

Permittee shall submit a Self-Monitoring Report (SMR) on the date(s) specified above. Monitoring results shall be summarized and reported on a District SMR form. The District will not accept formats other than what is shown in the SMR form; therefore, forms provided by the District or replicates must be used for reporting of results. Failure to receive the SMR forms does not relieve Permittee from the obligation to perform the self-monitoring and submit the report on the required date. The SMR form shall be completely filled-out, with copies of all laboratory results attached. The report shall indicate the concentration of all pollutants in the effluent for which sampling and analyses were performed, including water meter readings required for flow measurement.

If sampling performed by the permittee indicates a violation, the permittee shall notify the Source Control Division within 24 hours of becoming aware of the violation. The reporting may be accomplished by a telephone call, fax transmission, e-mail, or a personal visit to Source Control. The violation reporting shall contain the date and time of the wastewater sample, the discharge flow for the sample, a possible explanation for the violation(s), and the date scheduled for the resample.

2. Signatory Requirements

Prior to submittal of the SMR to the District, the results shall be verified and signed under penalty of perjury, by an authorized company official as defined in 40 CFR 403.

E. Additional Monitoring Requirements in Response to Non-compliance

1. Resampling

Upon submission of the SMR to the District by the required due date, the District will process the results for mass emission rate calculations, review the concentration results, and notify Permittee of the results. If the results indicate that a violation of the applicable concentration and/or mass discharge limits has occurred, a Notice of Violation will be issued and Permittee must repeat the sampling and pollutant analyses of the required parameters, and submit the results of the repeat analysis to the district within 30 days after becoming aware of the violation.

2. Reporting

a. The monitoring results shall be submitted as specified in E.1.

b. The requirements for reporting results, as described in D.1 and D.2, shall be followed for the additional monitoring requirements in response to non-compliance.

F. Requirements for Reporting Results of Voluntary Self-Monitoring

1. Any voluntary self-monitoring sample of the effluent obtained during a 24-hour period from the representative sampling point location identified in Part 1 of this permit, that is collected and analyzed in accordance with the guidelines shown in Attachment A, constitutes a valid sample. Results of the analysis for all valid samples shall be reported to the District, regardless of the outcome.

2. Self-monitoring results for all valid samples must be submitted using an official numbered Voluntary Self-Monitoring Report (VSMR) Form and received by the District within 30 days from the day the sampling event was concluded. Permittee shall obtain the official VSMR Form from the District, with a unique tracking/identification number for each day of self-monitoring.

3. The District will not consider VSMR Forms received after 30 days from the day the sampling event was concluded. Exceptions to the 30-day submittal policy due to extenuating circumstances or special situations shall be authorized by the District's General Manager or his/her designee.

4. Upon submission of the completed VSMR Form to the District by the required 30-day due date, the District will evaluate the sample results to determine compliance. If the results indicate that a violation of the applicable discharge limits has occurred, a notice of violation may be issued requiring Permittee to implement corrective measures.

II. NOTIFICATION REQUIREMENTS

A. Permittee shall comply with the notification requirements set forth in the current Wastewater Discharge Regulations:

1. Notification of Spill and Slug Loading

a. In the event Permittee is unable to comply with any permit condition due to a breakdown of equipment, accidents, or human error, or Permittee has reasonable opportunity to know that his discharge will exceed the discharge provisions of the user's permit, Permittee shall immediately notify the District by telephone. If the material discharged to the sewer has the potential to cause or result in a fire or explosion hazard, Permittee shall immediately notify the local fire department and the District.

b. Confirmation of this notification shall be made in writing no later than five (5) working days from the date of the incident. The written notification shall state the date of the incident, the reasons for the discharge or spill, what steps were taken to immediately correct the problem, and what steps are being taken to prevent the problem from recurring.

c. Such notification shall not relieve the user of any expense, loss, damage or other liability which may be incurred as a result of damage or loss to the District or any other damage or loss to person or property; nor shall such notification relieve the user of any fees or other liability which may be imposed by a District's Ordinance or other applicable law.

2. Notification of Bypass

a. Bypass of industrial wastewater to the sewer system is prohibited. The District may take enforcement action against the user, unless:

(i) Bypass was unavoidable because it was done to prevent loss of life, personal injury, or severe property damage;

(ii) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, elective slow-down or shut-down of production units or maintenance during periods of production downtime. This condition is not satisfied if adequate backup equipment could have been feasibly installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and,

(iii) Permittee submitted notices as required under 2.b.

b. If Permittee knows in advance of the need for a bypass, it shall submit a written request to allow the bypass to the District, if possible, at least ten (10) days before the date of the bypass.

c. The District may approve an anticipated bypass at its sole discretion after considering its adverse effects, and the District determines that the conditions listed in 2.a.(i-iii) are met.

d. Permittee shall provide telephone notification to the District of an unanticipated bypass that exceeds its permitted discharge limits within four hours from the time Permittee becomes aware of the bypass. A written report shall also be provided within five (5) days of the time Permittee becomes aware or could reasonably have been aware of the bypass. The report shall contain a description of the bypass and its cause; the duration of the bypass, including exact dates and times, and, if the bypass has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the bypass. Failure to submit oral notice or written report may be grounds for permit revocation.

B. Notification regarding Planned Changes

Permittee shall notify the District 90 days in advance prior to any facility expansion, production increase, or process modifications which may result in new or substantially increased discharges or a change in the nature of the discharge. Permittee shall notify the District in writing of the proposed expansion and shall submit any information requested by the District for evaluation of the affect of such expansion on the Permittee's discharge to the sewer system.

III. OTHER REPORTING REQUIREMENTS

A. Slug Discharge Control Plan

Permittee shall develop, maintain and implement in accordance with 40 CFR 403.8(f)(2)(v) a Slug Control Plan to respond to spills, emergency bypass and any accidental discharges that may result in a violation of any permit limits or conditions, or may significantly exceed the normal flow to the sewer system or pollutant loading. The plan shall contain detailed procedures to be followed by permittee in responding to a slug discharge at the Permittee's facility. The procedures shall include provisions to eliminate endangerment of human health and safety by containment and clean up of the slug discharge, and prevent any violation of Permittee's discharge limits and the District's Wastewater Discharge Regulations (Ordinances). The Plan shall also provide procedures and facilitate immediate notification of the District of a slug discharge event.

Permittee shall review and update the Slug Control Plan every two years.

The Slug Discharge Control Plan, at a minimum, must contain the following:

1. Description of the permittee's sewer discharge practices including non-routine batch discharges.
2. Description of stored chemicals including type and characteristic, volume, and chemical hazard classification.
3. Procedures to prevent slug discharges to the sewer system.
4. Description of equipment for responding to slug discharges.
5. Procedures for inspection and maintenance of the chemical storage areas to assure proper daily handling.
6. A copy of an operation log sheet recording the maintenance performed, volume of spill, and corrective measures taken.
7. Procedures for proper training of key personnel for handling slug discharges.
8. Emergency telephone numbers for promptly reporting slug discharges to the appropriate governmental agencies.

B. Waste Minimization Requirements

Upon request by the District, Permittee shall provide waste minimization plans to conserve water, investigate product substitution, provide inventory control, implement employee education, and other steps as necessary to minimize waste produced.

C. Water and Tax Bill Submittal

Permittee shall submit to the District, copies of Water and Tax Bills within 30 days of receipt of such bills.

D. Changes in Company Information

Permittee shall immediately inform the District of any changes or inaccuracies in the following company information which is currently on file:

COMPANY NAME: CAL-AURUM INDUSTRIES INC.	**PHONE:** (714) 898-0996 **FAX:** (714) 895-4681	**LOCAL SEWERING AGENCY:** CITY OF HUNTINGTON BEACH
MAILING ADDRESS: 15632 CONTAINER LANE HUNTINGTON BEACH, CA 92649	**RESPONSIBLE OFFICER:** PAUL A. GINDER PRESIDENT	**NO. OF EMPLOYEES:** 46 **WORK DAYS/YEAR:** 250
SERVICE ADDRESS: 15632 CONTAINER LANE HUNTINGTON BEACH, CA 92649	**DESIGNATED SIGNATORY:** PAUL A. GINDER PRESIDENT	**N.A.I.C.S. NUMBER:** 332813

E. Falsifying Information

Knowingly making any false statement on any report or other document required by this permit or knowingly rendering any monitoring device or method inaccurate is a crime and may result in the imposition of criminal sanctions and/or civil penalties.

PART 3 - STANDARD CONDITIONS

I. PROHIBITIONS, LIMITS AND REQUIREMENTS

Permittee is required to comply with the prohibitions and limits on discharges set forth in Article 2 of the current Wastewater Discharge Regulations:

A. Prohibited Discharges
B. Prohibition on Dilution
C. Prohibition on Surface Runoff and Groundwater
D. Prohibition on Unpolluted Water
E. Prohibition on the Use of Grinders
F. Prohibition on Point of Discharge
G. Prohibition on Medical Waste
H. Prohibition on Disposal of Spent Solutions and Sludges

II. CIVIL PENALTIES

All users of the District's system and facilities are subject to enforcement actions administratively or judicially by the District, U.S. EPA, State of California Regional Water Quality Control Board, or the County of Orange District Attorney.

Any person who violates any provision of the current Wastewater Discharge Regulations; or any permit condition, prohibition or effluent limitation; or any suspension or revocation order shall be liable civilly for a sum not to exceed $25,000.000 per violation, for each day in which such violation occurs.

A. Administrative Civil Penalties

Administrative Civil Penalties may be assessed as follows:

1.) In an amount which shall not exceed two thousand dollars ($2,000.00) for each day for failing or refusing to furnish technical or monitoring reports;

2.) In an amount which shall not exceed three thousand dollars ($3,000.00) for each day for failing or refusing to timely comply with any compliance schedules established by the District;

3.) In an amount which shall not exceed five thousand dollars ($5,000.00) per violation for each day of discharge in violation of any waste discharge limit, permit condition, or requirement issued, reissued, or adopted by the District;

4.) In any amount which does not exceed ten dollars ($10.00) per gallon for discharges in violation of any suspension, revocation, cease and desist order or other orders, or prohibition issued, or adopted by the District

III. CRIMINAL PENALITIES

Any person who violates any provision of the Ordinance is guilty of a misdemeanor which upon conviction is punishable by a fine not to exceed $1,000.00 or imprisonment for not more than thirty (30) days, or both. Each violation and each day in which a violation occurs may constitute a new and separate violation.

IV. SEVERABILITY

The provisions of this permit are severable. If any provision of those permit limits and/or requirements, or the application thereof, to the Permittee is held invalid, the remainder of the permit limits and/or requirements shall remain in full force and effect.

V. OTHER CONDITIONS

A. Permittee is required to comply with all regulations and discharge limits in the current Wastewater Discharge Regulations and any attachments to this permit.

B. Except as expressly authorized by the District, upon the sale or transfer of ownership of the business for which this permit is issued, this permit shall be void. The permittee shall notify the District in writing prior to the transfer of ownership and shall give a copy of the existing permit to the new owner or operator.

C. Issued Permits are for a specific user, for a specific operation at a specific location, create no vested rights, and are non-transferable unless conditions as stated in the Ordinance are met. If transfer is allowed, a copy of the existing permit must be given to the new owner or operator. Industrial Wastewater Discharge permits, their concentration limits or their mass emission rates shall not be transferred for an operation at a different location.

D. Permittee shall maintain plant records relating to wastewater discharge and waste manifests for a minimum of three years.

PART 4 - SPECIAL CONDITIONS FOR PERMIT NO. 11-1-089

1. **Wastewater Discharge Log Requirements [175]**
   Permittee shall comply with the Wastewater Discharge Log Requirements as specified in Attachment 175, maintain the log onsite, and make it available upon the District's request.

2. **Pretreatment system requirements [120]**
   Permittee shall implement any and all steps and measures (including, but not limited to, the installation of pretreatment equipment/technology, and/or the implementation of best management practices/pollution prevention measures, waste minimization measures, and process modifications) necessary to attain long-term compliance with the permitted discharge limits. If non-compliance occurs, Permittee will be required to install a pretreatment system equivalent to or better than Best Available Technology (BAT) as specified in Attachment 120.

3. **Wastewater Treatment Operator [135]**
   Permittee shall comply with the Wastewater Treatment Operator requirement as specified in Attachment 135.

ATTACHMENTS

PERMIT NO. 11-1-089

CAL-AURUM INDUSTRIES INC.

ATTACHMENT A
PERMIT NO. 11-1-089
CAL-AURUM INDUSTRIES INC.

SELF-MONITORING REQUIREMENTS

1. **Sampling and Analysis of Heavy Metals**

   a. **Composite Sampling.** Permittee shall collect and analyze a 24-hour composite sample of the wastewater effluent for heavy metals at a frequency specified in **Part 2** of the permit. All effluent sampling must be conducted using an automatic sampling device which is capable of collecting samples at 15-minute intervals during all hours of discharge in a 24-hour day. Flow-proportional samples are acceptable with a minimum of 96 samples collected per 24 hours of discharge. For batch dischargers, a grab sample is acceptable for a well-mixed batch; otherwise, a composite sample during the period of discharge must be obtained.

   b. **Discharge Flow.** Water meter readings shall be obtained during the start and end of composite sampling to determine the volume of water discharged during the 24 hour sampling period. Meter readings are necessary to determine the total flow needed for calculation of the daily mass emission rate for the actual wastewater discharged. Additionally, the start and stop times must be recorded. The units in which the water meter readings are expressed must be properly ascertained.

   Permittee shall measure and record daily total flow using flow measurement devices and methods that ensure an accurate measurement of the volume of monitored discharge. The use of effluent meters provides an accurate measurement of the volume discharged; however, in the absence of effluent meters, the OCSD accepts the use of incoming water meters or process meter totalizers with appropriate standard deductions such as domestic, process, and landscape losses. These deductions will be applied by the OCSD, upon processing of the self-monitoring report, to determine the volume of wastewater discharged to the sewer system. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurement is consistent with the accepted capability of that device.

   c. **Laboratory Analyses.** All wastewater samples shall be collected and analyzed in accordance with the appropriate procedures contained in 40 CFR 136. Where 40 CFR 136 does not include sampling or analytical techniques for the pollutants in question, analyses shall be performed using the most current edition of *"Standard Methods for the Examination of Water and Wastewater"*. Wastewater analyses shall be performed by a laboratory utilizing the approved method for performing the analyses on the required constituents. Upon the OCSD request, Permittee shall obtain from their laboratory and furnish to the OCSD, information regarding test methods and equipment used, including quality assurance/quality control (QA/QC) information. Other information deemed necessary by the OCSD to determine the adequacy, accuracy, and precision of the results may also be required.

2. **Sampling and Analysis for Cyanides**

   a. **Sampling.** Permittee shall collect and analyze a sample of its wastewater effluent for cyanides at a frequency specified in **Part 2** of the Permit. All sampling for cyanide must be conducted by taking grab samples of the wastewater after cyanide treatment, but prior to dilution with other streams. If there is no cyanide treatment, the samples must be taken at the end of the cyanide process before dilution with other process streams. A minimum of four grab samples shall be taken independently during hours of operation within a 24-hour period. The grab samples may be composited by the laboratory personnel prior to analysis. Proper sampling and preservation techniques in accordance with EPA requirements must be used to ensure representative sample results.

   b. **Laboratory Analyses.** All wastewater samples shall be collected and analyzed for cyanides in accordance with the appropriate procedures contained in 40 CFR 136 using EPA Methods. Wastewater analyses shall be performed by a laboratory utilizing the approved method for performing the analyses on the required constituents. Upon the OCSD request, Permittee shall obtain from their laboratory and furnish to the OCSD, information regarding test methods and equipment used, including QA/QC information. Other information deemed necessary by the OCSD to determine the adequacy, accuracy, and precision of the results may also be required.

3. **Sampling and Analysis for Total Toxic Organics (TTOs)**

   a. **Sampling.** Permittee shall collect and analyze samples of the wastewater effluent at the sample point for TTOs at a frequency specified in **Part 2** of the permit. All effluent sampling for volatile organic compounds must be conducted by taking grab samples of the wastewater effluent. A minimum of four grab samples shall be taken independently during hours of operation within a 24 hour period. Each sample shall be analyzed independently for toxic organic constituents present in the facility. The average concentration from the four grab sample results with concentrations greater than 10 µg/L shall be used to determine compliance with TTOs mass emission and/or concentration limits.

   b. **Laboratory Analyses.** All wastewater samples shall be collected and analyzed in accordance with the appropriate procedures contained in 40 CFR 136 using EPA Methods (i.e., for Purgeable Halocarbons and Aromatics, use Methods 601 and 602, or 624). Wastewater analyses shall be performed by a laboratory utilizing the approved method for performing the analyses on the required constituents. Upon the OCSD request, Permittee shall obtain from their laboratory and furnish to the OCSD, information regarding test methods and equipment used, including QA/QC information. Other information deemed necessary by the OCSD to determine the adequacy, accuracy, and precision of the results may also be required.

   c. **TTO Constituents.** The TTO limit is a summation of individual values greater than 0.01 milligrams per liter for the following organics listed under a specific test method:

      Method 624 - 1,1,1-Trichloroethane, 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, 1,1-Dichloroethane, 1,1-Dichloroethene, 1,2,4-Trichlorobenzene, 1,2-Dichlorobenzene, 1,2-Dichloroethane, 1,2-Dichloropropane, 1,3-Dichlorobenzene, 1,3-dichloropropene, 1,4-Dichlorobenzene, 2-Chloroethylvinyl Ether, Acrolein, Acrylonitrile, Benzene, Bromodichloromethane, Bromoform, Bromomethane, Carbon Tetrachloride, Chlorobenzene, Chloroethane, Chloroform, Chloromethane, Dibromochloromethane, Ethylbenzene, Hexachlorobutadiene, Methylene Chloride, Naphthalene, Tetrachloroethene, Toluene, Trichloroethene, Vinyl Chloride, trans-1,2-Dichloroethene

4. **Sampling and Analysis of BOD and TSS**

   a. **Composite Sampling.** Permittee shall collect and analyze a 24-hour composite sample of the wastewater effluent at the sample point for BOD and TSS at a frequency specified in **Part 2** of the permit. All effluent sampling must be conducted using an automatic sampling device which is capable of collecting samples at 15-minute intervals during all hours of discharge in a 24-hour day. Flow-proportional samples are acceptable with a minimum of 96 samples collected per 24 hours of discharge. For batch dischargers, a grab sample is acceptable for a well-mixed batch; otherwise, a composite sample during the period of discharge must be obtained.

   b. **Discharge Flow.** Water meter readings shall be obtained during the start and end of composite sampling to determine the volume of water discharged during the 24 hour sampling period. Meter readings are necessary to determine the total flow needed for calculation of the daily mass emission rate for the actual wastewater discharged. Additionally, the start and stop times must be recorded. The units in which the water meter readings are expressed must be properly ascertained.

      Permittee shall measure and record daily total flow using flow measurement devices and methods that ensure an accurate measurement of the volume of monitored discharge. The use of effluent meters provides an accurate measurement of the volume discharged; however, in the absence of effluent meters, the OCSD accepts the use of incoming water meters or process meter totalizers with appropriate standard deductions such as domestic, process, and landscape losses. These deductions will be applied by the OCSD, upon processing of the self-monitoring report, to determine the volume of wastewater discharged to the sewer system. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurement is consistent with the accepted capability of that device.

   c. **Laboratory Analyses.** All wastewater samples shall be collected and analyzed in accordance with the appropriate procedures contained in 40 CFR 136 using EPA Methods. Wastewater analyses shall be performed by a laboratory utilizing the approved method for performing the analyses on the required constituents. Upon the OCSD request, Permittee shall obtain from their laboratory and furnish to the OCSD, information regarding test methods and equipment used, including QA/QC information. Other information deemed necessary by the OCSD to determine the adequacy, accuracy, and precision of the results may also be required.

5. **Sampling and Analysis for Oil and Grease (O&G)**

   a. **Sampling.** Permittee shall collect and analyze samples of the wastewater effluent at the sample point location for O&G at a frequency specified in **Part 2** of the permit. A minimum of four grab samples shall be taken independently during hours of operation within a 24-hour period. The grab samples may be composited by the laboratory personnel prior to analysis. Proper sampling and preservation techniques, in accordance with EPA requirements, must be used to ensure representative results.

   b. **Laboratory Analyses.** All wastewater samples shall be collected and analyzed in accordance with the appropriate procedures contained in 40 CFR 136 using EPA Methods. Wastewater analyses shall be performed by a laboratory

utilizing the approved method for performing the analyses on the required constituents. Upon the OCSD request, Permittee shall obtain from their laboratory and furnish to the OCSD, information regarding test methods and equipment used, including QA/QC information. Other information deemed necessary by the OCSD to determine the adequacy, accuracy, and precision of the results may also be required.

ATTACHMENT 175

WASTEWATER DISCHARGE LOG REQUIREMENT

Permittee must maintain a log of all wastewater discharge activities from batch treatment operation which shall be made available upon District's request. As a minimum requirement, the log must include but not limited to, the following information: volume of wastewater treated and discharged, pH, metal content and date/time of each batch discharge. An example of this log is shown below:

Date of Discharge	Time	Volume of Discharge (gal)	CONCENTRATIONS, mg/L								pH	Operator
			Ag	Cd	Cr	Cu	Ni	Pb	Zn	CN		

ATTACHMENT 120

PRETREATMENT SYSTEM DRAWINGS

A. Description of the New or Modified Pretreatment System Proposal

The pretreatment system design proposal shall provide adequate treatment or disposal methods for all waste/wastewater streams generated. This shall include pretreatment, recovery/re-use, and/or disposal method for running rinses, spent chemicals, and drag-outs. If the wastestream is not treated on-site, the name, address and phone number of the prime and alternate vendor for transport, recovery/reuse, treatment, or disposal shall be given.

B. Pretreatment System Location Drawings and Layout

The **Pretreatment System Location Drawing** shall provide information regarding the location of the pretreatment system relative to the manufacturing process, sewer lines, and the wastewater sampling point. This drawing may be incorporated into the Manufacturing Process Layout. All drawings shall convey clearly all the information required and shall have good contrast, clear background, and legible labeling. **Drawings shall have a minimum dimension of 11" x 17" and shall not exceed a maximum dimension of 30" x 42". Three sets of drawings and information are required.**

The **Pretreatment System Layout** shall provide information regarding layout of all pretreatment equipment, including pretreatment and chemical feed tanks, treatment units, etc. This drawing may be incorporated into the manufacturing location drawing if desired. All drawings shall convey clearly all the information required and shall have good contrast, clear background, and legible labeling. **Drawings shall have a minimum dimension of 11" x 17" and shall not exceed a maximum dimension of 30" x 42". Three sets of drawings and information are required.** As a **minimum requirement,** the drawing shall be drawn to scale and shall show each of the following:

1. Map orientation or North arrow.
2. Name of company and address, drawing name and number, scale size, date drawn/revised, name of draftsman, name of person approving the drawings and approval signatures.
3. Legend for symbols used.
4. Layout of all pretreatment tanks and equipment. Each process tank/equipment must be properly identified using the same reference number used in the **Pretreatment System Process Flow and Instrumentation Diagram** (described below) with its corresponding name.
5. All aboveground and belowground **incoming water** piping connection to process tanks/equipment. Flow direction must be indicated using arrows.
6. All aboveground and belowground **wastewater** piping connections from process tanks/equipment. Flow direction must be indicated using arrows.
7. All floor drains, trenches and sinks, and where they are connected.

C. Pretreatment System Process Flow and Instrumentation Diagram

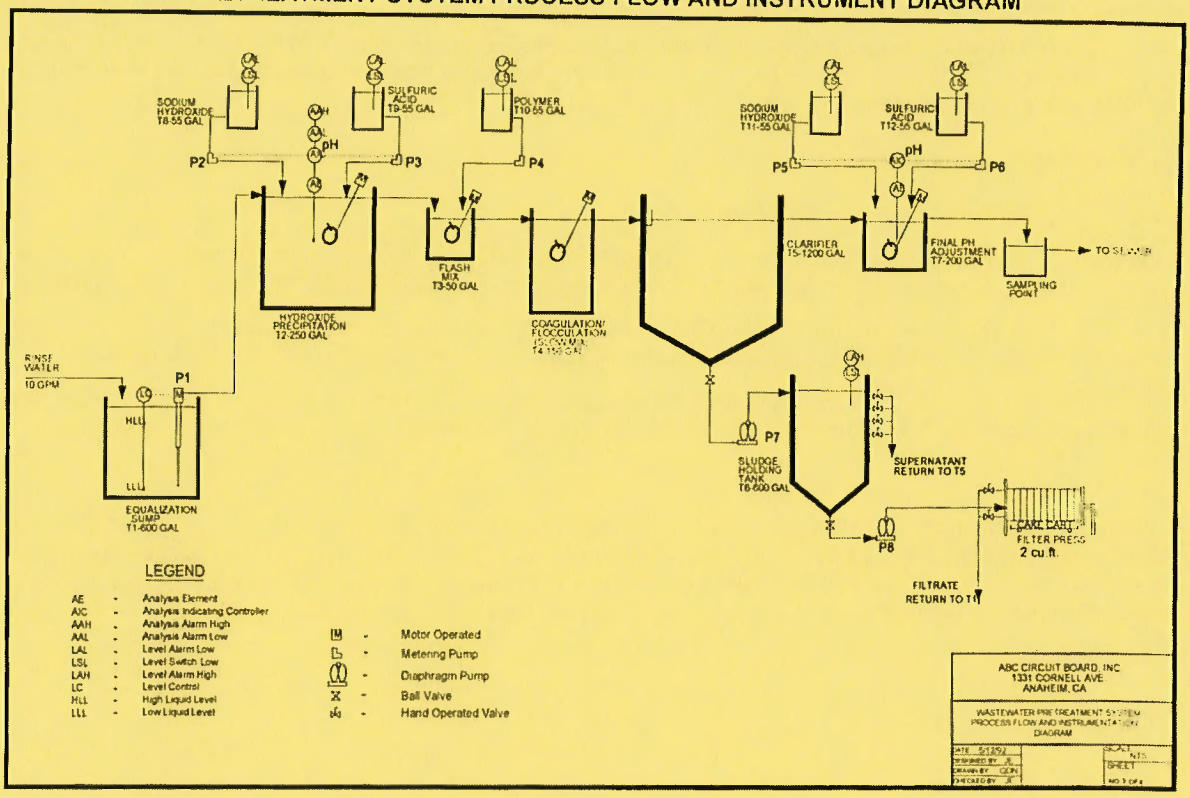
The **Pretreatment System Process Flow and Instrumentation Diagram** shall provide information regarding all wastewater treatment processes. The purpose of this diagram is to show how wastewater treatment is accomplished through the different stages of the process.

The process flow diagram shall:

1. Show design rating or capacity of treatment system.
2. Show identification and characterization of all the segregated wastestreams, including intermediate streams, clearly showing direction of flow, flow rates (minimum, average, and maximum), and constituents of each stream.
3. Show all pretreatment equipment including but not limited to pumps, mixers, control valves, equalization tanks, pH adjustment tanks, clarifiers, filters, electro-recovery systems, ion exchange systems, and filter presses.
4. Show process control system including the controlled element (pH, Oxidation-Reduction Potential (ORP), flow, liquid level), controllers, recorders, totalizers, and the signal to the device that is controlled (metering pump, control valve, pump motor).

All drawings shall convey clearly all the information required and shall have good contrast, clear background, and legible labeling. **Drawings shall have a minimum dimension of 11" x 17" and shall not exceed a maximum dimension of 30" x 42". Three sets of drawings and information are required.** An example of the wastewater pretreatment system Process Flow and Instrumentation Diagram is shown on the following page.

WASTEWATER PRETREATMENT SYSTEM PROCESS FLOW AND INSTRUMENT DIAGRAM



ATTACHMENT 135

WASTEWATER TREATMENT OPERATOR REQUIREMENTS

In accordance with Article 4, Section 402(A), of the *District's Wastewater Discharge Regulations* (Ordinance) a Class I industrial wastewater discharger is required to retain a qualified industrial wastewater treatment operator(s) to ensure proper operation and maintenance of the pretreatment system and maintain compliance with discharge limits at all times. The primary responsibilities of the wastewater treatment operator shall be:

1. Operating the continuous and batch pretreatment system including maintenance of equipment, calibration of measuring instruments such as pH and ORP meters, preparation of treatment chemicals, inventory control, maintenance of pretreatment system performance logs, and troubleshooting of the pretreatment system operation.
2. Record keeping of sludge, non-treatable waste, spent chemicals wastehauling, and sampling and monitoring analysis data.
3. Collecting wastewater samples for laboratory analysis and preparation of appropriate reports and documents.

Any of the following minimum qualifications for an industrial wastewater treatment operator are considered acceptable by the District:

- B.S. degree in Chemical Engineering or Environmental Engineering
- B.S. degree in any other Engineering or Science, preferably with strong background in Chemistry, industrial wastewater treatment processes, and process control
- A.A. degree in Science with strong background in Chemistry (at least two semesters of General Chemistry) and at least two years experience in industrial wastewater treatment
- Industrial Wastewater Treatment Operator Certificate from the California Water Environment Association (CWEA). CWEA offers certification programs for industrial waste treatment plant operators ranging from Grade I to Grade IV. A Grade I certificate is the minimum requirement. (For additional information regarding CWEA certification, **call 510-382-7800 or visit CWEA's web page at www.cwea.org**).

An individual trained in industrial wastewater treatment operation shall obtain a CWEA Certification within one year of being designated as the wastewater treatment operator. If no certification is obtained at the end of one year, permittee shall hire a wastewater treatment operator who meets the above qualifications.

In the event that the CWEA Certification is chosen as the primary qualification, the following is a course that may help prepare an individual for the CWEA certification program examination:

- Industrial waste pretreatment operator training courses offered by California State University, Sacramento: *Industrial Waste Treatment* and *Treatment of Metal Wastestreams.* For more information, contact :

  Kenneth D. Kerri, Program Director
  Office of Water Programs
  California State University, Sacramento
  6000 J Street
  Sacramento, CA 95819-6025
  (916) 278-6142

- The Hazardous Material Technician Program is offered in many community colleges throughout California including Golden West Community College in Huntington Beach, Irvine Valley College in Irvine, Riverside Community College in Riverside and West Los Angeles College in Culver City.

Upon the District's request, permittee shall submit a report outlining the qualified operator's experience, education, and provide a copy of the supporting documents.